- Automation Software
- / Intelligent HMI
- Industrial Communication
- Intelligent Systems
- Embedded Automation PCs
- / DIN-Rail IPCs
- / Intelligent RTUs
- Power & Energy Automation
- Machine Automation

# Advantech Automation Devices and Computing Star Product Guide





### Intelligent Automation, Seamless Integration **Control Panel** TPC-1581WP Cellular IP Router/ Gateway Star Product Highlights EKI-6340 EKI-6351-A EKI-6331AN Embedded **Automation PC** Control Cabinet PC Power Automation Controller CompactPCI Series UNO-2000 Series UNO-1000 Series UNO-3000 Series **=** ] 0. MIC-3043 PCM-24S2WF MIC-3121 iDoor Module USB Data Serial Communication Acquisition Data Acquisition Card **Energy Communication** PCM-24D2R4 Card and Controller EtherCAT Motion Control PCM-3642I Solution Motion Control PCIE-1802 **Master Card** PCM-3730I UNOP-1628 USB-4716 PCIE-1674PC PoE Card PCM-3680I PCI-1203 PCIE-1810 EtherCAT I/O PCM-3813I DMU-3010 AMAX-1752 UNOP-1514 APAX-5040 ADAM-5000/ECAT PCI-1285 AMAX-1240 APAX-5017 IEC 61131



# **Automation Software**

### Minimize Programming Time while Optimizing Performance

Advantech's automation software lineup includes SCADA software, network management, remote device management, HMI runtime development software, SoftLogic programming tools, OPC Server, and other user-friendly programming tools and utilities. Advantech WebAccess web-based HMI/SCADA software is a shining example. It helps customers view, control and configure systems remotely through the Internet from any smart device. Advantech's software and hardware solutions empower automation professionals to develop integrated automation systems efficiently.



### Automation Software





#### **Advantech WebAccess**

### Web-based HMI/SCADA Software

- Cross-browser, cross-platform business intelligent dashboard for remote data analytic service
- Distributed SCADA architecture with central database server and multi-layer inter-operable SCADA nodes
- Google Maps and GPS location tracking integration
- Supports open interfaces web services, widget interfaces and WebAccess APIs



### Advantech WebAccess/NMS

### Visualize Device Connectivity

- Easy device location with Google map support
  Ethernet, WLAN, Cellular integration network topology
- Remote configuration, monitoring and F/W upgrading
- Supports Advantech Ethernet-based platforms and modules
- 100% browser-based software system
- Supports a variety of mobile devices and browsers



#### **SUSIAccess**

### Remote Device Management Software

- Device monitoring and automatic alerts by email/SMS
- Quick access to remote control for device diagnostics and repair
- Complete protection from cyber threats (powered by McAfee application control technology)
- Simple backup and recovery (powered by Acronis backup and recovery technology)



### **WebOP Designer/Panel Express**

### HMI Runtime Development Software

- Provides user friendly easy configuration
- Application software function objects
- Supports project protection, upload/download operations
  Collects data from many devices using various methods
- Supports over 400 industrial communication protocols





### **CODESYS**

#### IEC-61131-3 SoftLogic Control Software

- Cross-compiling: 5 standard languages can be cross-compiled to each other
- Real-time performance
- Provides free IDE tool
- Powerful debugging tools and simulation support
- Fulfill integration with Advantech control platform



### **DAQNavi**

### Software Development Package for Advantech DAQ Products

- Rapid Application Design (RAD) helps developers to build a program in the shortest time
- Thread-safety design to ensure high reliability under multi-thread environment
- Intuitive utility Navigator integrates configuration tools, testing panel, manual, tutorial, and example codes

### **Advantech Data Logger**

post analysis

### Data Logging Application Software

- Online and offline monitoring of acquired signal
   Exports recorded data to .txt and .xls (Excel) for
- Flexible display with customized plot, title, cursor and axis



### **OPC Server**

### OPC Server for ADAM & Modbus Devices

- Supports Microsoft Windows XP/ 2000/ 7/ 8/ 8.1
- Supports Advantech ASCII, Modbus RTU, and Modbus/TCP protocol
- Compliant with the latest OPC Data Access 1.0, 2.04 and 3.0 standards
- Compliant with the latest OPC Alarm and Events 1.0 and 1.2 standards



# Intelligent HMI

### Leading the Evolution of Intelligent Operator and Panel PCs

As we stand on the edge of the new era of Industry 4.0, Advantech as a leading enabler of intelligent factories, will continue to innovate the next generation of HMI products and solutions for different industries.

We provide an integrated and comprehensive range of HMI products including Control Panel Computers and Thin-client Panel Computers (TPC and SPC), Industrial Monitors (FPM), Web Operator Panels (WebOP), Industrial Panel PCs (IPPC) and Panel PCs (PPC) for intelligent factories, automation markets, and domain focused markets such as food and beverage, oil and gas and railway transportation.



### Control Panel Computers >







### **TPC-1881WP**

18.5" WXGA TFT LED LCD Intel<sup>®</sup> Core™ i7/ i3 with PCT Multi-Touch Panel Computer

- Intel<sup>®</sup> Core<sup>™</sup> i7-4650U/ i3-4010U with 4GB DDR3L SDRAM
- 7H Hardness Glass Surface Widescreen with PCT Multi-touch, IP66 Front Protection and True-flat
- Expandable System I/O, Isolated Digital I/O, Fieldbus and Communication by iDoor Technology
- · Built-in ikey and Home-key for an intuitive UI
- · Supports two USB 3.0 and HDMI for independent display





### **TPC-1581WP**

15.6" HD TFT LED LCD Intel® Core™ i3 with PCT Multi-Touch Panel Computer

- Intel<sup>®</sup> Core<sup>™</sup> i3-4010U 1.7GHz with 4GB DDR3L SDRAM • 7H Hardness Glass Surface Widescreen with PCT Multi-touch, IP66 Front Protection and True-flat
- Touch Design · Expandable System IO, Isolated Digital IO, Fieldbus and Communication by iDoor Technology
- Built-in ikey and Home-key for an intuitive UI
- · Supports USB 3.0 and HDMI for independent display







#### TPC-1582T/ 1282T

15"/ 12" XGA TFT LED LCD Intel® Core™ i3 Touch Panel Computer

- Intel<sup>®</sup> Core<sup>™</sup> i3-4010U 1.7GHz with 4GB DDR3L SDRAM
- More Durable 5-wire Resistive Touch Screen with IP66
- PCle and mini PCle expansion support
- Expandable System I/O, Isolated Digital I/O, Fieldbus and Communication by iDoor Technology

### Thin Client Panel Computers



4GB DDR3L SDRAM



TPC-1751T/ 1551T/ 1251T/ 651T 17"/ 15"/ 12.1"/ 5.7" XGA TFT LED LCD Intel®

Atom™ Dual-core Thin Client Panel Computer

Intel<sup>®</sup> Atom<sup>™</sup> Dual-core E3827 1.75 GHz processor with

• IP66 Front Protection and More Durable 5-wire Resistive











### **TPC-1551WP**

15.6" WXGA TFT LED LCD Intel® Atom™ **Dual-core Thin Client Panel Computer** 

- Intel<sup>®</sup> Atom™ Dual-core E3827 1.75 GHz processor with 4GB DDR3L SDRAM
- 7H Hardness Glass Surface 16:9 Widescreen with PCT Multi-touch, IP66 Front Protection and True-flat
- Supports iDoor Technology (TPC-1251T-EHKE required)

**ÍL**ink Ík+y







### **TPC-1051WP**

10.1" WXGA TFT LED LCD Intel® Atom™ **Dual-core Thin Client Panel Computer** 

- Intel<sup>®</sup> Atom<sup>™</sup> Dual-core E3827 1.75 GHz processor with 4GB DDR3L SDRAM
- 7H Hardness Glass Surface Widescreen with PCT Multi-touch, IP66 Front Protection and True-flat
- Supports iDoor Technology (TPC-1251T-EHKE required)

### True-flat Monitors >

• -20°C ~ 60°C Wide Operating Temperature

Touch Screen with True-flat Touch Design Supports iDoor Technology (TPC-1251T-EHKE required)











21.5" Semi-industrial Monitor with PCT for long-distance / iLink Technology

- 16:9 FHD LED backlight LCD with True-flat Seamless Design
- 7H Hardness Glass Surface with PCT Multi-touch and
- IP65 Front Protection · Supports 5 points multi-touch via USB interface in
- Windows 7/8 · iKev for OSD control and remote/local source switch
- · Robust design with SECC chassis and Magnesium alloy front panel





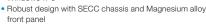




### FPM-7151T/7121T

15"/ 12.1" XGA TFT LED LCD

- 15"/ 12.1" XGA 50K Lifetime LED Backlight LCD with Anti-glare Screen and Tempered Glass
- IP66 Certified Front Panel Protection with True-flat Seamless Design
- -20°C ~ 60°C Wide Operating Temperature
- Robust Design with SECC Chassis and Aluminum Front Panel
- DP/VGA video input
- Combination RS-232 & USB Interface for Touchscreen Function





21.5"/ 18.5"/ 15.6" Industrial Monitor with

FPM-7211W/ 7181W/ 7151W

PCT, Direct VGA+DVI ports

- Supports 10 points multi-touch via USB interface in Windows 7/8

### Web Operator Panels >







### WebOP-3120T

### 12" XGA Cortex™-A8 Operator Panel with Wide Operating Temperature

- Microsoft® Windows CE 6.0
- Backup memory FRAM in 128KB (64 words) without battery
- Power & Terminal I/O ports isolation protection
- -20°C ~ 60°C Wide Operating Temperature
- Front panel flat-sealed with IP66 compliance





### WebOP-3100T

### 10.1" WSVGA Cortex™-A8 Operator Panel with Wide Operating Temperatures

- Microsoft® Windows CF 6.0.
- Backup memory FRAM in 128KB (64 words) without
- Power & Terminal I/O ports isolation protection
- -20°C ~ 60°C Wide Operating Temperature
- Front panel flat-sealed with IP66 compliance





### WebOP-3070T

### 7" WVGA Cortex™-A8 Operator Panel with Wide Operating Temperatures

- Microsoft® Windows CE 6.0
- Backup memory FRAM in 128KB (64 words) without battery
- Power & Terminal I/O ports isolation protection
- -20°C ~ 60°C Wide Operating Temperature
- Front panel flat-sealed with IP66 compliance

### Entry Level Operator Panels >



#### WebOP-2100T

### 10.1" WSVGA Cortex™-A8 Operator Panel

- 65,536 colors TFT LCD, ARM9-based CPUs
- Front panel flat-sealed with IP66 compliance
- 10W low power consumption
- Supports over 400 PLC communication protocols
- Communicates with up to four types of devices
- Flexible runtime download and maintenance



#### WebOP-2070T

### 7" WVGA Cortex™-A8 Operator Panel

- . 65,536 colors TFT LCD, ARM9-based CPUs
- Front panel flat-sealed with IP66 compliance
- 10W low power consumption
- Supports over 400 PLC communication protocols
- Communicates with up to four types of devices
- Flexible runtime download and maintenance



#### WebOP-2040T

### 4.3" WQVGA Cortex™-A8 Operator Panel

- 65,536 colors TFT LCD, ARM9-based CPUs
- Front panel flat-sealed with IP66 compliance
- 10W low power consumption
- · Supports over 400 PLC communication protocols
- Communicates with up to four types of devices
- Flexible runtime download and maintenance

### Stationary Panels >









### **SPC-1581WP**

### All around IP65 15.6" WXGA Stationary Panel with Intel® i5 Processor

- Intel<sup>®</sup> Core<sup>™</sup> i5-4300U 1.9GHz with 4GB DDR3L SDRAM
- All around IP65 protection with waterproof M12 connector
- Built-in ikey and home-key for an intuitive UI
- 7H Hardness Glass Surface with PCT Multi-touch
- 1 x RS-232/ 1 x USB/ 2 x LAN/ 24V<sub>DC</sub>-in with Waterproof





### **SPC-1840WP**

### All around IP65 18.5" Stationary Panel with AMD® Dual-core Processor

- All around IP65 18.5" Stationary Panels with AMD® Dual-core Processor
- 7H Hardness Glass Surface Widescreen with PCT Multi-touch, True-flat Touch Design
- · Built-in ikey and Home-key for an Intuitive UI
- Robust design with All Around IP65 design, VESA support
- 1 x RS-232/ 1 x USB/ 2 x LAN/ 24V<sub>DC</sub>-in with Waterproof M12 connector





### **SPC-2140WP**

### All around IP65 21.5" Stationary Panel with AMD® Dual-core Processor

- All around IP65 21.5" Stationary Panels with AMD® Dual-core Processor
- 7H Hardness Glass Surface Widescreen with PCT Multi-touch, True-flat Touch Design
- Built-in ikey and Home-key for an Intuitive UI
- Robust design with All Around IP65 design, VESA support
- 1 x RS-232/1 x USB/2 x LAN/24V<sub>DC</sub>-in with Waterproof M12 connector

### Domain-focused Computers >





### IPPC-8070WV

### 7" Multifunctional HMI for transportation applications

- Intel<sup>®</sup> Atom<sup>™</sup> 1.6GHz processor
- IP65 front BZL protection with resistive touch screen
- · GPS/ GSM/ Wifi/ Radio optional communication module
- 2 x USB, 2 x LAN, 2 x COM Ports
- Supports iManager, SUSIAccess and Embedded Software APIs









### **IPPC-5211WS**

### All Around IP69K 21.5" TFT LED LCD with PCT Touch Panel and Corrosion-proof 316L Stainless Steel

- Intel<sup>®</sup> Celeron<sup>®</sup> Quad-core J1900 2 GHz
- All-round IP69K protection with corrosion-proof 316L stainless steel
- Sealed and rugged design with high reliable Components
- Options for Cfast/ HDD







### FPM-8151H

### 15" XGA TFT LED LCD Industrial Monitor with Corrosion-proof 316L Stainless Steel Front Panel for Hazardous location

- · Corrosion-proof 316L Stainless Steel Front Panel
- IP65 Certified Front Panel Protection
- -20 °C ~ 60 °C Wide Operating Temperature
- More Durable 5-wire Resistive Touch Screen with Anti-glare and Tempered Glass

### Entry Level Monitors >



### **FPM-2170G**

# 17" SXGA Industrial Monitor with Resistive Touchscreen and Direct-VGA Port

- 17" SXGA TFT LCD with 50K hours LED backlight life time
- Robust design with IP65 aluminum front panel
- Anti-glare screen
- Supports Panel, Wall, Desktop, Rack or VESA arm mounting
- Combination RS-232 & USB interface for touchscreen function



### FPM-2150G

# 15" XGA Industrial Monitor with Resistive Touchscreen and Direct-VGA Port

- 15" XGA TFT LCD with 50K hours LED backlight life time
- Robust design with IP65 aluminum front panel
- Anti-glare screen
- Supports Panel, Wall, Desktop, Rack or VESA arm mounting
- Combination RS-232 & USB interface for touchscreen function



### **FPM-2120G**

# 12" SVGA Industrial Monitor with Resistive Touchscreen and Direct-VGA Port

- 12" SVGA TFT LCD with 50K hours LED backlight life time
- Robust design with IP65 aluminum front panel
- Anti-glare screen
- Supports Panel, Wall, Desktop, Rack or VESA arm mounting
- Combination RS-232 & USB interface for touchscreen function

### Ruggedized and Wide-temperature Monitors >



### **FPM-3191G**

# 19" SXGA Industrial Monitor with Resistive Touchscreen, Direct-VGA and DVI Ports

- Robust design with stainless steel chassis and IP65 aluminum front panel protection
- OSD control pad on front panel
- Supports industrial 24Vpc and 12Vpc power input
- Supports panel, wall, desktop, rack or VESA arm mounting





#### FPM-3171G

# 17" SXGA Industrial Monitor with Resistive Touchscreen, Direct-VGA and DVI Ports

- Robust design with stainless steel chassis and IP65 aluminum front panel protection
- -20°C ~ 60°C Wide Operating Temperature
- OSD control pad on front panel
- Supports industrial 24V<sub>DC</sub> and 12V<sub>DC</sub> power input
- Supports panel, wall, desktop, rack or VESA arm mounting





### **FPM-3151G**

# 15" XGA Industrial Monitor with Resistive Touchscreen, Direct-VGA and DVI Ports

- Robust design with stainless steel chassis and IP65 aluminum front panel protection
- -20°C ~ 60°C Wide Operating Temperature
- OSD control pad on front panel
- Supports industrial 24V<sub>DC</sub> and 12V<sub>DC</sub> power input
- Supports panel, wall, desktop, rack or VESA arm mounting

### Fanless Panel PCs ▶



### PPC-3120/3100

# 12.1" XGA/ 10.4" SVGA Intel<sup>®</sup> Atom™ Dual-core Fanless Panel PC

- Intel® Atom™ Dual-core D2550 1.86GHz Processor with Max 4GB DDR3 SDRAM
- Fanless Design and Low Power Consumption
- 5-wire Resistive Touch Screen
- Optional PCI x1/ PCIe x1 Expansion Kit
- Automatic data flow control over RS-485





### PPC-3170/3150

# 17" SXGA/ 15" XGA Intel<sup>®</sup> Atom™ Quad-core Fanless Panel PC

- Intel<sup>®</sup> Atom<sup>™</sup> Quad-core E3845 1.91GHz Processor with Max 8GB DDR3L SDRAM
- -20°C ~ 60°C Wide Operating Temperature
- 5-wire Resistive Touch Screen
- Built-in PCI x1/ PCIe x1 Expansion Slot
- Built-in Isolated RS-422/485 with Autoflow
- Optional CF and CFast module







### PPC-4211W/ 4151W

21.5" FHD/15.6" WXGA Intel<sup>®</sup> Core<sup>™</sup> i5/ Celeron<sup>®</sup> with PCT Multi-Touch Wide Screen Fanless Panel PC

- Intel® Core™ i5-4300U 2.9GHz/ Celeron® 2980U
   1.6GHz Processor with Max 8GB DDR3L SDRAM
- Entirely flat panel with PCT touch screen
- Supports one PCIe x4/ PCI x1 Bus Expansion
- Built-in isolated RS-422/485 with Autoflow

### Multi-functional Panel PCs >



Core™ i + Compact

### **PPC-6120**

12.1" XGA Intel<sup>®</sup> Core<sup>™</sup> i5/ i3/ Celeron<sup>®</sup>

- Intel® 4th Generation Core™ i7/ i5/ i3/ Celeron® Processor with 2x 204-pin SODIMM DDR3/DDR3L SDRAM (Max 16G)
- Built-in Isolated RS-422/485 with Autoflow, Dual Intel<sup>®</sup> GbE
- Optional PCI x1/ PCIe x1 Expansion Kit
- 5-wire Resistive Touch Screen



Core™ i + Advanced

### PPC-6170/6150

17" SXGA/15" XGA Intel<sup>®</sup> Core™ i5/ i3/ Celeron<sup>®</sup> Panel PC

- Intel<sup>®</sup> Core<sup>™</sup> i5-3610ME/ i3-3120ME/ Celeron<sup>®</sup> 1020E with Max 8GB DDR3/ DDR3L SDRAM
- Dual HDD support Intel RAID 0/1, and Optional second HDD or ODD
- Multiple Bus Expansion Slots, one PCle x4, one PCl + Optional one PCle x1, two PCl, Optional two PCle x1
- Built-in Isolated RS-422/485 with Autoflow Dual Intel<sup>®</sup> GbE



Core™ i + Economic

### PPC-8170/8150

17" SXGA/15" XGA Intel<sup>®</sup> Core<sup>™</sup> i5/ i3/ Celeron<sup>®</sup> Panel PC

- Intel® Core™ i5-3550S/ i3-3220 with 2x 204-pin DDR3 SDRAM (Max 8GB)
- One PCle x4 or PCl slot
- Supports 6 x USB, 6 x COMs, 8 bit GPIO
- Supports iManager, SUSIAccess and Embedded Software APIs

# **Industrial Communication**

### Simplify the Way You Connect

Advantech's Industrial Communication products draw on over 20 years of experience to provide reliable wired and wireless communication (3G, GPRS, and WLAN) for mission critical applications. These products include: Industrial Ethernet Switches, Industrial Wireless AP/Client, Media Converters, Serial Device Servers, Cellular IP Gateways, and Modbus Gateways. They are also capable of securely transmitting critical and sensitive information, remotely monitoring and controlling networked devices and emphasizing high communication capabilities for industrial applications.



### Industrial Wireless AP/ CPE







### Industrial UMTS/HSPA+ Cellular Router

- Universal five-band UMTS/HSPA+ 850/900/1800/1900/2100 MHz
- Dual WAN (Ethernet WAN and Cellular WAN) for redundancy
- Routing and firewall security protocols
- Advanced VPN ((IPSec/SSL/GRE/L2TP/PPTP)





### **EKI-1331**

### 1-port Serial/Ethernet to HSPA+ IP Gateway

- Universal five-band UMTS/HSPA+ 850/900/1800/1900/2100 MHz
- Protocols converting between serial and Ethernet: Modbus RTU & TCP
- Provides NAT and VPN
- EMC Level III for industrial standards



### EKI-1321/1322

# 1/ 2-port RS-232/ 422/ 485 to GPRS IP Gateways

- Universal quad-band GSM/GPRS 850/ 900/ 1800/ 1900 MHz
- Dual SIM slots for connection redundancy
- Extra SD slot for data buffering and auto recovery
- Provides NAT and VPN

### Industrial Wireless Access Point

### **EKI-6340 Series**

IEEE 802.11 a/ b/ g/ n Outdoor Single to Triple Radio Wi-Fi AP/ Client

- EMC Level 4
- C1D2 certified
- -40~75°C operating temperature range
- EN50155 compliant



#### EKI-6351-A

### IEEE 802.11 a/ b/ g/ n Wi-Fi AP/ Client

- EMC Level 4
- C1D2 certified
- -40~75°C operating temperature range
- EN50155 compliant



### Industrial Wireless Access Point





### **EKI-6310GN**

IEEE 802.11 b/ g/ n Wireless Access Point/ Client

- With N-type connector for antenna connector
- High output power 27dBm
- Standard 802.3af PoE PD
- WEP/ WPA/ WPA2/ IEEE 802.1 x authentication support



### **EKI-6331AN**

IEEE 802.11 a/ n Wireless Access Point/ Client

- MIMO 2 x 2 11n
- Embedded 16dBi dual-polarity directional antenna with external R-SMA connector for optional antenna
- High output power 24 dBm
- IGMP snooping protocol support

### Wireless Serial Device Servers



### EKI-1361/ 1362

1/ 2-port RS232/ 422/ 485 to 802.11b/ g/ n WLAN Serial Dervice Servers

- Links any serial device to an IEEE 802.11b/ g/ n network
- Provides 1/2 x RS-232/ 422/ 485 port
- Secures data access with WEP, WPA, and WPA2
- Supports WLAN Ad-Hoc and Infrastructure modes

### Industrial Ethernet Managed Switches





### **EKI-9778**

### 1U Rackmount Switch with Combo Port Flexibility 24GbE + 4 10GbE Managed Switch

- 24 x GbE ports and 4 x 10GbE (4x SFP+) ports
- 16 x gigabit combo ports (1000BASE-T/TX or GbE SFP)
- Dual redundant power 110 ~ 220 V<sub>AC</sub> input
- Fanless design
- IEEE1588 PTPv2 with 1-step precision clock





### EKI-9316/9312

### 16/12 Port Full Gigabit Managed DIN

- · All Gigabit connections support dual-ring protection and non-blocking traffic forwarding
- Redundancy: X-Ring+ (recovery time < 20ms)
- STP, RSTP, MSTP for better redundancy
- Dual power input, dual image for system reliability
- Operating temperature: -40 ~ 75 °C



### EKI-7659C

### 8+2G Combo Port Gigabit Managed Redundant Ethernet Switch

- 8 x Fast Ethernet ports, plus 2 x Gigabit combo ports
- SFP socket for Easy and Flexible Fiber Expansion
- Redundancy: X-Ring Pro (recovery time < 20ms)
- Dual 12 ~ 48 V<sub>DC</sub> power input and 1 relay output
- IPv6 support

### **Proview Series Ethernet Switch**





### EKI-5728/ 5725/ 5528/ 5525

### 8-port/5-port Fast and Gigabit ProView Series Ethernet Switch

- · Communicates with SCADA software via Modbus/TCP
- Communicates with NMS via SNMP
- Port-based QoS for deterministic data transmission
- eMark certified (EKI-5728)
- Loop detection

### Industrial Ethernet **Unmanaged Switches**





### EKI-3728/3725/3528/3525

### 8-port/5-port Fast and Gigabit Unmanaged Ethernet Switch

- Supports IEEE 802.3az, Energy Efficient Ethernet
- Super compact IP40 protection
- Supports IEEE 802.1p QoS- VIP port
- Supports redundant 12 ~ 48 Vpc dual power input and P-Fail relay
- Loop detection

### Media Converters >



### EKI-3541M/3541S/ST

### 10/100T (X) to Multi/ Single-Mode SC/ST Type Fiber Optic Media Converter

- Supports Link Fault Pass-through (LFP) function
- Supports full/half duplex flow control
- Supports MDI/MDI-X auto crossover
- Supports redundant 12-48 V<sub>DC</sub> dual power input
- ST Connector Provided

### Industrial PoE Switches >





### EKI-9316P/9312P

### 16/12 Port Managed DIN Rail Switch with

- All Gigabit connections support dual ring protection
- Redundancy: X-Ring+ (recovery time < 20ms)
- IEEE 802.3at PoE+ to supply 30W power
- IEEE 802.3af/802.3at per port with system PoE power management
- Dual power input, dual image for system reliability
- Operating temperature: -40 ~ 75 °C

### **EKI-7659CPI**

### 8+2G Port Gigabit Managed PoE Switch w/ Wide Temperature

- 8 x Fast Ethernet ports with PoE injector function, plus 2 x Gigabit Copper/ SFP combo ports
- IEEE802.3af compliant, provides 15.4Watts per port.
- Redundancy: X-Ring Pro (recovery time < 20ms)
- IPv6 support

### **EN50155 Compliant Switches**





### EKI-6500/ EKI-9500 Series

### EN50155 M12 Managed/ Unmanged **Ethernet Switch**

- EN50155 compliant
- Redundancy: X-Ring Pro (recovery time < 20ms)</li> (Managed models)
- M12 connectors
- · Waterproof fiber optic connectors
- Dual 12 ~ 48 Vpc power input and 1 relay output

### Serial Device Server



### EKI-1526/T/ 1528/T

### 16/8-port RS-232/422/485 Serial

#### Device Server

- 2 x 10/100 Mbps Ethernet ports for LAN redundancy
- · Supports up to 921.6 kbps, and any baud rate setting
- · Provides COM port redirection (Virtual COM), TCP and UDP operation modes
- . Built-in 15 KV ESD protection for all serial signals
- · Standard 1U rackmount size



### EKI-1524/CI/I 1522/CI/I/ 1521/CI/I

4/2/1-port RS-232/ 422/ 485

#### Serial Device Server

- 2 x 10/ 100 Mbps Ethernet ports for LAN redundancy
- -40~70 °C operating temperature range
- 2KV Isolation for RS-422/485 signals
- EMC Level 4
- IPv6/IPv4 Dual Stack
- Port Buffering Support

### Modbus Gateways ▶



### EKI-1224CI/I/ 1222CI/I/ 1221CI/I

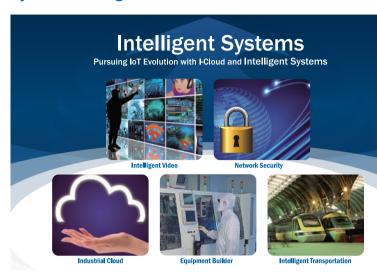
### 4/2/1-port Modbus Gateway

- 2 x 10/ 100 Mbps Ethernet ports for LAN redundancy
- Supports up to 921.6 kbps, and any baud rate setting
- · Automatic RS-485 data flow control
- -40 ~ 75 °C operating temperature range
- 2KV Isolation for RS-422/485 signals
- EMC Level 4

# Intelligent Systems

### Accelerating Cloud Computing, iConnectivity and Intelligent Video Solutions

With innovative technologies for cloud computing applications and services (industrial and video servers), edge computing applications (fanless, slim & portable devices), to high performance embedded systems (blade computing, network processor platforms, and DSP processing), Advantech is devoted to transforming our embedded systems into intelligent systems with smart, secured, energy-saving features. Designed by our Industrial Cloud Built-in Services and professional System Design-To-Order Services (System DTOS) teams, Advantech's intelligent systems are designed to target multiple vertical markets in transportation, industrial automation (machine automation, equipment/machine builders), digital signage, and also video applications (video infrastructure and video surveillance).



### Industrial Computers



#### ACP-4D00

# 4U Dial-node 350mm Chassis for Machine Automation Application

- Easy maintenance dual-node design
- Supports half-sized slot SBC and 6-slot backplane
- Maximum 3 available slots for 260mm length add-on cards
- Standard 4U height, ultra short depth of 350mm
- Self-diagnostics functions of system fan and temperature alarm



#### ACP-4020

### Compact 4U Rackmount Chassis for Halfsize SBC or ATX/ MicroATX Motherboard

- Compact 4U rackmount chassis, with shallow 350mm depth
- Supports ATX/ MicroATX motherboards or backplanes up to 15 slots for half-size SBC
- 1 x Internal 2.5" and two external 3.5" drive bays support up to five 2.5" HDD/ SSDs (via optional kit IDT-3120F)
- Supports 80 plus single power supply up to 700W
- Smart fan speed control for system fans



#### **HPC-7442**

### 4U Rackmount Chassis for EATX/ ATX Motherboard with Up to 8 SAS/ SATA HDD Trays

- Shock-resistant disk drive bay holds four hot-swap 3.5" and 2.5" SAS/ SATA disk trays, one slim optical disk drive, and one 3.5" internal drive
- With installation of optional storage upgrade kit, eight hot-swap HDD trays provide high storage capacity
- Supports 80 Plus certified single and redundant power supplies
- Front-accessible system fan
- LED indicators and audible alarm notification for system fault detection

### Server-grade IPCs



vmware<sup>\*</sup>

#### **ASMR-823**

### Intel® Xeon® E5 ATX Server Board

- LGA2011 ATX Server Board with dual Xeon<sup>®</sup>
   F5-2600(v3) processors
- DDR4 2133 MHz RDIMM up to 192 GB
- 4 x PCle x16 slots (Gen3), two PCle x8 (Gen3) and one PCle x4 (Gen2) slots
- 9 x SATA3 ports and six USB 3.0 port



vmware<sup>\*</sup>

#### **ASMB-923**

### Intel® Xeon® E3 EATX Server Board

- LGA 2011 EATX Server Board with dual Xeon<sup>®</sup> E5-2600(v3) processor
- DDR4 2133 MHz RDIMM up to 256 GB
- Four PCle x16 slots (Gen3), two PCle x8 slots (Gen3.0) and one PCie x4 (Gen2.0)
- 10 SATA3 ports and 4 x USB 3.0 ports

### GPU Server



**vm**ware READY

### **AGS-920**

# 2U GPU Server with Dual Intel<sup>®</sup> Xeon<sup>®</sup> E5 Processors

- Supports NVIDIA Tesla, Grid, Quadra, AMD FirePro, and Advantech designed DSP cards
- 8 x DDR3 Non-ECC/ECC/REG 1600 DIMM up to 128GB
- Supports 4 x FH/FL double-depth PCle x16 expansion cards + 1 FH/HL single-depth PCle x8 expansion card
- 8 x Hot-swap SATA/SAS HDD bays
- Quad GbE LAN (IPM 2.0) port

# Machine Vision ▶ Systems



### AIIS-1240 / 1440

PoE / USB 3.0 Machine Vision System, Intel® Core™ i CPU, Dedicate to 4-CH PoE

### / USB 3.0 Camera

- Intel<sup>®</sup> 3rd/ 2nd Core<sup>™</sup> i7/ i5/ i3 CPU (LGA1155)
- AllS-1240: 4-CH GbE PoE (Power over Ethernet), IEEE 802.3af compliant
- AllS-1440: 4-CH USB 3.0 with dedicated controller
- · Volume less than 3 Liters
- Easier fan filter maintenance
- Internal USB Type-A with lock design

### Fanless Compact Systems





### ARK-5261

Intel<sup>®</sup> Celeron<sup>™</sup> Processor J1900 Fanless Compact Equipment System with PCIe & PCI Expansion Slots

- Intel® Celeron™ processor J1900
- Supports one PClex1 & 2x PCl slots
- Supports four RS-232/422/485 (COM 1/2 with 5V/ 12V power); ARK-5261i sku has isolation feature
- Supports 2 Giga LAN/ 1 USB 3.0+ 5 USB 2.0/ Dual 2.5" HDD/ GPIO& printer port
- Supports wide power range of 9~ 30V DC input





### **ARK-5420**

3<sup>rd</sup> Gen Intel<sup>®</sup> Core<sup>™</sup> i Processor Fanless Compact Equipment System with PCle & PCI Expansion Slots

- Supports 3rd Gen Intel® Core™ i5/ Celeron BGA type
   CPU with Intel® HM76 PCH
- Supports 1x PClex4 & PCl slots and 1x Mini-PCle (Full size)
- Supports VGA& HDMI/USB 3.0/ serial ports
- Supports wide temperature -25~ 60°C
- Supports 9~ 36V wide range DC input

### Transportation Systems >





### ITA-1711

Intel<sup>®</sup> Celeron<sup>™</sup> Processor J1900 Fanless AFC System with Dual GbE and Display

- Supports 9 ~ 36 V wide range DC input
- Supports up to two GbE, six USB 2.0X ten COM ports
- Supports RS-232/ 422/ 485 with serial ports automatic flow control
- Onboard DDR3 memory up to 4GB and optional NVRAM
- Supports one 2.5" HDD





#### ITA-2210

EN50121-4 Full Compliance 2U Fanless Systems for Wayside Control with Intel<sup>®</sup> Atom<sup>™</sup> D525 Processor

- Supports Intel<sup>®</sup> Atom™ D525 Processor at 1.8GHz
- Supports three ITAM modules, one PC 104+ and one Mini-PCle cards
- Supports two VGA/ eight USB 2.0/ two COM ports
- Supports wide temperature -25~ 60°C
- Supports single/ dual power module





#### ITA-5730

EN 50155 Certified Compact Fanless System with 3<sup>rd</sup> Gen Intel<sup>®</sup> Core<sup>™</sup> i Processor

- $\bullet$  Satisfies temp. standard: EN 50155 TX (-40  $\sim$  70°C) and IEC 61373 body mount class B
- Compliant with EN 50121-3-2 EMC test standard
- Ruggedized connectors (M12) used for communication and power ports
- Optional PCI/ miniPCIe slots for expansion
- Supports easy-swap HDD/ SSD/ CF modules

### Multimedia Processing Cards ▶



#### **DSP-8682**

Full-length PCI Express Card with 8 TI 8-core DSPs

- On-board 8 x TI TMS320C6678 DSPs with PCle Gen three 8 interfaces
- 8 x TMS320C66x DSP Core Subsystems @ 1.0/ 1.25 GHz per DSP
- 2 GB DDR-1333 memory per DSP



#### **DSP-8662H**

4-ch HDMI PCIe Video Decoder Card with 4-ch 3G-SDI inputs and SDK

- Powered by quad TI TMS320DM8168 SoC
- 4-channel HDMI video/ audio outputs up to 1920 x 1080 at 60 fps
- Supports H.264/ MJPEG/ RAW HW decoding
- 4-channel SDI video + audio inputs up to Full HD 60 fps per channel

# High Performance ▶ Server



### **CGS-6000**

2U Server for Carrier Grade and Optimized I/O Deployment

- Supports dual Intel® Xeon® E5v2 series processors
- Up to 512GB DDR3 with 16 Registered ECC DIMMs
- 4 x full-height, full-length PCle x8 slots
- 2 x full-height, half-length PCle x4 slots
  4 x 2.5" hot-swappable SAS/ SATA HDD/ SSD drives

### CompactPCI® Platforms



### MIC-3328

3U CompactPCI PlusIO Intel® 3<sup>rd</sup> Generation Core™ Processor Blade

- Supports 3<sup>rd</sup> generation Intel<sup>®</sup> Core<sup>™</sup> processor and QM77 PCH
- 4 GB DDR3 1600 soldered SDRAM with ECC (max 8GB)
- 1 x 2.5" SATA-II SSD, CFast, XMC, SATA NAND Flash on board (optional)
- Triple independent display support





### MIC-3396

6U CompactPCI 4<sup>th</sup> Generation Intel<sup>®</sup> Core™ i3/ i5/ i7 Processor Blade

- Supports 4<sup>th</sup> Generation Intel<sup>®</sup> Core<sup>™</sup> i3/ i5/ i7 processors and QM87 PCH with embedded graphic display
- 2 x SATA ports, 1 x USB 3.0, 4 x USB 2.0, 2 x DVI ports, 2 x RS-232 ports, 1 x PS/2 connector and PCle x 8 interface to RTM
- Optimized single-slot SBC with 2.5" SATA-III HDD/ CFast socket/ on-board flash (optional)



### **CPCI-8220**

6U CompactPCI Freescale QorlQ P2040 Ruggedized Processor Blade

- Supports Freescale QoriQ<sup>™</sup> P2040 at 1.2 GHz
- Up to 4GB DDR3 with ECC support
- Supports extended operating temperature range -40°C ~ 85°C (optional)
- Supports WR VxWorks 6.9 or WR Linux 4.3

# **Embedded Automation PCs**

### Open and Robust Computing Power for Automation Applications

Advantech's offers a complete range of Embedded Automation PCs with each series coming in three sizes: palm, small and regular. All of them are dedicated to providing fanless, industrialproven and application ready control platforms. With a robust design, they include multiple expansion solutions and versatile mounting methods to fulfill the needs of different applications. The UNO-1000/3000 series is ideal for din-rail, enclosure and book mounting in control cabinets and the UNO-2000 series is a versatile model for stand-mount environments. In addition, all new UNO products support Advantech iDoor Technology which utilizes the mPCIe format and gives customers the flexibility to configure the various I/O requirements based on different applications. Modules for iDoor Technology include: Fieldbus protocol; digital and analog I/O; smart sensor, communication and memory.



### Control Cabinet PCs >





### UNO-1252G

### Intel® Quark Palm-Size DIN-Rail Controller

- Intel<sup>®</sup> Quark 400Mhz processor with 256MB memory
- 2 x LAN, 2 x mPCle, 2 x COM, 8 x GPIO, 2 x USB, 1 x microSD, 1 x SIM, 1 x power terminal
- Compact with fanless design
- Chassis grounding protection





### **UNO-1372G**

### Intel® Atom Quad-Core Small-Size **DIN-Rail Controller**

- Intel® Atom E3845 1.91GHz processor with 4GB DDR3L memory
- 3 x GbE, 3 x USB, 2 x COM, 1 x VGA, 1 x HDMI. audio, 1 x mSATA, 2 x mPCle, 1 x SATA, 8 x DI/O, 1 x power terminal
- Exchangeable RTC battery with easily access at top side





### **UNO-1483G**

### Intel<sup>®</sup> 4th Gen Core™ i3 Regular-Size **DIN-Rail Controller**

- Intel<sup>®</sup> 4th Gen Core<sup>™</sup> i3 processor up to 1.7GHz with 8GR DDR3L memory
- 4 x GbE, 3 x mPCle, 1 x PCle, 4 x USB 2.0/3.0, 1 x RS-232, 2 x RS-422/485, 1 x VGA, 1 x DP, 8 x DI/O and audio ports
- · Dual power input and remote power button for reducing nower down time



















### UNO-3382G/3384G

#### Intel<sup>®</sup> Core™ i7 Book Mount

### **Automation Computer**

- Intel<sup>®</sup> 4th Generation Core<sup>™</sup> i7/Celeron processors with 4GB/8GB DDR3L memory
- 2 x GbE, 2 x USB 2.0, 2 x USB 3.0, 1 x RS-232/422/485, 2 x display ports, 2 x PCI/PCIe, 2 x mPCIe, 1 x mSATA slot
- Dual hot-swappable HDD/SSD slots with thumb screws for easy maintenance
- Supports DIN-rail stand wall and book mounting

### UNO-3483G

### Intel® Core™ i7 Enclosure Mount **Automation Computer**

- Intel<sup>®</sup> 3<sup>rd</sup> Gen Quad Core processor, up to 2.1 GHz with 8GB DDR3L memory
- 2 x GbE, 2 x USB 2.0, 2 x USB 3.0, 1 x RS-232, 1 x RS-422/485, 1 x VGA, 1 x HDMI, 1 x PClex4, 3 x mPCle, 1 x mSATA slot
- Dual hot-swappable HDD/SSD slots with thumb screws for easy maintenance

### UNO-2483P

Controller

### Intel® Core™ i7/Celeron Regular-Size **Automation Computer**

Embedded Vision ▶

- Intel<sup>®</sup> 4th generation Core<sup>™</sup> i7/Celeron processors up to 1.9GHz with 4GB/8GB DDR3L memory
- 4 x PoE, 4 x GbE, 4 x USB 2.0/3.0, 2 x RS-232. 2 x RS-422/485, 1 x VGA, 1 x HDMI, audio
- · Rubber stopper design with captive screw

### Emnedded Automation Computers >





### UNO-2272G

### Intel® Atom™ Palm-Size

### **Automation Computer**

- Latest Intel<sup>®</sup> Atom<sup>™</sup> processors up to 1.86 GHz with 2GB DDR3 memory
- 1 x GbE, 3 x USB 2.0, 1 x RS-232, 1 x VGA, 2 x mPCle, audio
- Compact fanless design







### UNO-2483G/2473G

### Intel® 4th Gen Core™ i7/ i3/ Celeron/

### Atom™ Regular-Size Automation Computer

- Intel<sup>®</sup> 4th Gen Core<sup>™</sup> i7/i3/Celeron/ Atom<sup>™</sup> processors up to 1.9GHz with 4GB/8GB DDR3L memory
- 4 x GbE, 4 x USB 2.0/3.0, 2 x RS-232, 2 x RS-422/485, 3 x mPCle, 1 x VGA, 1 x HDMI, audio
- · Chassis grounding protection





### **UNO-2362G**

### AMD® Dual Core T40E Small-Size **Automation Computer**

- AMD<sup>®</sup> Dual Core T40E 1.0GHz processor with 2GB DDR3 SO-DIMM memory 1 x GbE, 4 x USB 2.0, 1 x RS-232, 1 x RS-485,
- 1 x mPCle, 1 x DP, 1 x HDMI Daisy-chain for Ethernet with auto-bypass protection enabled

### Advantech iDoor Modules >



### **PCM-2300MR**

MR4A16B, MRAM, 2MByte

- 2MB MRAM Storage
- Speed 6 MB/Sec



#### PCM-24R1TP

Intel 82574L, GbE, IEEE 1588 PTP, RJ45 x 1

- 1 port GbE LAN
- IEEE 1588 precision time protocol ready





**PCM-24U2U3** 

USB 3.0 mPCle card, USB-A type x 2

- 2 port USB 3.0
- USB A type



#### PCM-24D2R2/ PCM-24D2R4

OXPCle952 UART, Isolated RS-232, RS-422/485, DB9 x 2

- 2000 V<sub>DC</sub> isolation protection
- RTS/CTS/Xon/Xo flow control





### PCM-26R2EC

Hilscher netX100 FieldBus mPCle, EtherCAT. RJ45 x 2

- Real-time fieldbus EtherCAT protocol
- Supports Master/Slave





### PCM-26D2CA

SJA1000 CANBus, CANOpen, DB9 x 2

- CAN 2.0 A/B
- 1Mbps, 16MHz



### PCM-23C1CF

CFast, Ejection Type I, CFast x 1

- 1 port CFast I/O card
- CFast 3.0, Type I/II



### PCM-24R2GL

Intel i350 mPCle, GbE, IEEE 802.3ab, RJ45 x 2

- 2 port GbE LAN
- Intel i350



### PCM-24S2WF

Atheros AR9462, 802.11 a/b/g/n 2T2R w/ BT4.0, SMA x 2

- Atheros AR9462
- 802.11 a/b/g/n 2T2R w/ Bluetooth 4.0



#### PCM-24D4R2/ PCM-24D4R4

OXPCle954 UART, Non-isolated RS-232, RS-422/485, DB37 x 1

- Non isolation 4 COM ports
- 50 bps ~ 921.6 kbps serial speed (RS-422/485)





### PCM-26R2EI

Hilscher netX100 FieldBus mPCle, EtherNet/IP, RJ45 x 2

- · Real-time fieldbus EtherNet/IP protocol
- Supports Master/Slave





### PCM-26D1DB

Hilscher netX100 FieldBus mPCle, PROFIBUS, DB9 x 1

- Fieldbus PROFIBUS protocol
- Supports Master/Slave



### PCM-23U1DG

Internal Locked USB Slot for USB Dongle, USB x 1

- 1 port USB I/O card
- USB A type w/ lock





#### PCM-24R2PE

Intel i350, GbE, PoE IEEE 802.3af, PD, RJ45 x 2

- 2 port PoE (Power Over Ethernet)
- Singel port 15.4W of DC power



### PCM-24S23G

6-band HSPA Cellular Module, GPS, SIM Holder. SMA x 2

- 3.75G HSPA+GPS
- Dual-SIM card holder with switch for redundancy



#### PCM-27D24DI

Digital I/O. Isolated 16DI/8DO. DB37 x 1

- 16DI. 8DO
- 2500 V<sub>DC</sub> isolation protection





### PCM-26R2PN

Hilscher netX100 FieldBus mPCle, PROFINET, RJ45 x 2

- · Real-time fieldbus PROFINET protocol
- Supports Master/Slave





### PCM-26R2PL

Hilscher netX100 FieldBus mPCle, POWERLINK, RJ45 x 2

- Real-time fieldbus POWERLINK protocol
- Supports Slave

# **DIN-Rail IPCs**

### The Next Generation of Scalable Automation Controllers

Advantech's APAX products are PC-based controllers which leverage embedded computing technology to achieve the same level of ruggedness as PLCs. With an open architecture and scalable I/O Modules, the APAX series is more flexible in order to implement various modern control strategies. It also inherits an excellent communication capability to collaborate with other industrial devices. Not only does it have super reliability, but the APAX bus provides backup and redundancy functionality to enhance the total availability.



### APAX-5580 Controller and Modules













### **APAX-5580**

### **APAX High Performance Controller**

- Intel® 4th gen. Core i7/i3/Celeron CPU inside
- 2 x mPCle interfaces for wireless communication
- · One key operating system recovery
- Dual power input and UPS support

### **APAX-5435**

### APAX iDoor interface Module

- · Supports Fieldbus iDoor module
- Supports mPCle interface

### **UPS Module**

### APAX UPS Module

- Provides emergency power when the main power fails
- Supports fast boot from standby mode

### APAX-5580 PCIe Modules ▶





### **APAX-5490**

#### RS-232/422/485 Module

- Support RS-232/422/485
- Auto flow control in 485 mode





### **APAX-5430**

#### APAX SATA HDD Module

- SATA I/II/III 2.5" HDD/SDD Support RAID 0/1
- Support Hot swap

### Couplers >





### APAX-5070/5071/5072

### Fieldbus Communication Coupler

- Revised to support 1ms Modbus response time
- · Flexible Modbus mapping table
- Supports UDP Data Streaming function and Event Alarms

### I/O Modules >





#### APAX-5090

### Communication Module with APAX Local Bus

- 4 x RS-232/422/485 ports
- Acts as a Modbus gateway with APAX-5070
- Supports distributed topology with APAX bus



### **APAX-5017H**

#### 12-ch High Speed Analog Input Module

- Voltage and current inputs including ± 10 V and 4 ~ 20 mA
- Each channel can be configured with different input types and ranges
- 1000 samples/second per channel



### **APAX-5080**

#### 4/8-ch High Speed Counter Module

- 5 counter:Up, Up/Down, Pulse/Direction, A/B phase, Frequency
- 4 x DI channels for counter gate inputs
- · 4 x DO channels for alarm outputs

# Intelligent RTUs

### Smart IoT Devices with Dual Wireless Network Capability and Flexible I/O Options

The ADAM-3600 is an intelligent iRTU, mainly used in the oil, gas and water industries. Intelligent network nodes in the IoT, can control the downstream field devices to complete delivery tasks, transfer data to upstream devices wired or wirelessly. It is key to connecting devices to the Internet of Things architecture. The ADAM-3600 has a high performance and low power processor. adopts 20 local I/O points and wired and wireless communication modes, users can collect, process and distribute the local information. It has a built-in real-time operating system and a realtime database, providing customers with an open interface and supports diverse programming languages.



### Open Standard Intelligent RTU



### ADAM-3600-C2G

### 8 AI / 8 DI / 4 DO / 4-Slot Expansion and Dual Wireless

- TI Cortex A8 600MHz CPU with DDR3L 256MB RAM
- RT-Linux OS with TagLINK realtime database
- Onboard IO- 8AL / 8DL / 4DO with 4-Slot I/O expansion flexibility
- Internal 2 x Mini-PCle Interface for Dual Wireless Networking Certified Wireless Solution Zigbee/ Wi-Fi/ 3G/ 4G/ GPRS
- IEC61131-3 & C programming language SDK support · Modbus/TCP, Modbus/RTU & DNP3 protocol support
- Wide operation temperature -40~70°C
- Support iCDManager for remote connectivity diagnosis
- iRTU Studio for off-line configuration and remote deployment









### Intelligent Ethernet I/O Module >





### **ADAM-3600-A1F**

### 16 DI / 8 Relay with 4-Slot Expansion

- 16-ch Digital Input, 8-ch Relay Output on board I/O
- Flexible I/O deployment by 4-slot expansion module
- · Datalog by internal memory, SD card, USB
- Support the Access Control function
- · Auto firmware update by USB and SD card
- Remote monitor, control and configure through a Web browser
- · Supports built-in web server and RESTful Web service















### I/O Expansion Modules >



### **ADAM-3600 Series I/O Expansion Modules**

- ADAM-3651 8-ch Digital Input Module
- ADAM-3656 8-ch Digital Output (Sink type) Module
- ADAM-3624 2-ch Analog Output Module
- ADAM-3660 4-ch Relay Output Module
- ADAM-3618 3-ch Thermocouple Module ADAM-3617 4-ch Analog and Input Module

# **Power & Energy Automation**

### Ensure Reliable P&E Automation with IEC 61850-3 and IEEE 1613 Compliant Products

Advantech provides Power and Energy computers, controllers, and data acquisition module with rugged, cableless designs for harsh environments in Smart Substation and Green Energy applications. The UNO-4600 series and ECU-4000 series are compliant with the hardware requirements of IEC-61850-3, which defines the international standards of network and system communications in smart substation. Advantech also provides power and energy controllers (ECU-1000) for transformer and GIS switches, IED (Intelligent Electronic Devices) applications.



















### **ECU-4674**

Intel® Atom™ N2600 Substation Computers for Power Automation Applications

- Intel<sup>®</sup> Atom™ N2600 1.6GHz CPU
- Supports 2 x RS-232 isolated ports, 16 x RS-232/485
- Supports 2 x 10/100/1000 Base-T, and 6 x 10/100 Base-T
- iCDManager: intelligent Connectivity Diagnose Manager

### **ECU-4784**

Intel® Haswell Core i7 Power & Energy Automation Computer with 8 x LAN. 10 x COM and 2 x Expansion Slots

- Intel® Haswell Core i7 4650U 1.7GHz processor
- Supports 1 x 10/100/1000 Base T RJ-45 (Support AMT, Teaming Function, PXE, 1588)
- Supports 7 x 10/100/1000 Base T RJ-45 (Supports Teaming Function, PXE, 1588)
- iCDManager : intelligent Connectivity Diagnose Manager

### UNO-4673A/4683

Intel® Atom™ D510/ Core™ i7 Substation Computers for Power Automation Applications

- Intel<sup>®</sup> Atom<sup>™</sup> D510 1.66 GHz CPU (UNO-4673A)/Intel<sup>®</sup> Core™ i7 2.0 GHz CPU (UNO-4683)
- Supports fiber optic,IRIG-B, 6 x LAN, and 2 x COM
- · Supports PCI, Mini PCI, Mini PCIe, and PCI-104 expansions

### Power & Energy Automation Controllers >





Intel® Atom™ D510 Modular Power & **Energy Controller** 

- Intel<sup>®</sup> Atom™ D510 CPU
- 1 x BS-232 port/ 2 x BS-485 isolated ports
- 2 x 10/100Base-T BJ-45 connectors
- Windows® CE 6.0. WES 2009, and Linux ready solution
- Supports 2 x PCI-104 extension slots



Xscale @ PXA-270 520MHz All-in-one Open RTU

- Xscale @ PXA-270 520 MHz CPU
- 1 x BS-232 port 3 x BS-485 isolated ports 1 x VGA
- 2 x 10/100Base-T BJ-45 connectors
- 8-ch 16-bit differential Analog Input
- · 32-ch isolated Digital Input/Output



### **ECU-1710A**

Intel® Atom™ D510 Automation Controller Combined with Embedded Computer and **DAQ Cards** 

- Intel<sup>®</sup> Atom™ D510 CPU
- 2 x RS-232 ports
- 2 x 10/100Base-T RJ-45 ports
- 16-ch Al/4-ch AO/16-ch DIO/1-ch Counter
- Integrated PCI-1710UL & PCI-1720U DAQ cards

### Power & Energy Automation Extension Cards ▶



### ECU-P1706/ P1300

Simultaneous Al Card Combined with Vibration Signal Modulate Card for ECU-1871

- Simultaneous 8-ch Al with PCI-104
- 250KS/S, 16-bit, 8K Samples On-board FIFO
- 2-ch, 32-bit Timer/Counter
- 0.1Hz-25Hz adjustable low pass filter (ECU-P1300)



### UNOP-1618D/ 1628D

8-port Isolated RS-232/422/485 with/ without Port-to-port Isolation for UNO-4673A/4683

- 8 x COM ports
- Selectable RS-232/422/485 port
- Isolation 2500V<sub>DC</sub> (UNOP-1628D)
- Automation RS-485 data flow control



### **UNOP-1514C/ RE/ PE**

4-port Fiber Optic LAN Card for UNO-4673A/ 4683

- I AN 100 Base-FX
- Distance: Up to 2 km
- IEEE 802.3, 802.3u, 802.3x
- Wavelength: 1310nm
- 4 x SC type Multi-mode fiber ports

# **Machine Automation**

### **Integrated Soft Computing to Enable Intelligent Machines**

Supporting Advantech's PCI-1245/1265/1285/1245E/1285E/1245L series, SoftMotion is an important core technology in the machine automation field. Advantech independently developed its own SoftMotion control technology and uses the FPGA (Field Programmable Gate Array) and DSP (Digital Signal Processing) as the core-computing hardware platform. Meanwhile, based on the three motion control architectures - centralized, distributed, embedded. Advantech's comprehensive product offering helps our customers to continuously progress their technologies and optimize customer's devices control to minimize their programming needs.



### Motion Control PCI Cards >



#### PCI-1245E/ 1285E

Economic SoftMotion 4/8-axis Stepping and Servo Motor Control PCI Card

- Softmotion on DSP
- T&S-curve speed profile, Prog. Acc and Dec
- · Jog Move, P to P move, Home Move
- 2-axis Linear interpolation, E-Gear
- Single axis Position/ Speed override



### PCI-1245/ 1265/ 1285

Standard SoftMotion 4/6/8-axis Stepping and Servo Motor Control PCI Card

- Functions supported by Economic version
- 2 axis circular move, Helical Move
- · Path table, Tangential move, Look Ahead
- Superimposed Move, E-CAM, Tigger/ Latch
- Group position/ Speed override
- 8DI/ 8DO/ 2AI (PCI-1265)



### PCI-1245L

Basic SoftMotion 4-axis Stepping and Servo Motor Control PCI Card

- SoftMotion on FPGA
- · Single end pulse output for stepping motor
- T&S-curve speed profile, Prog. Acc and Dec
- Jog Move, P to P move, Home Move
- 2-axis Linear interpolation
- Single axis position/ Speed override

### AMONet Master Cards & Slave Modules



### PCI-1202U

#### 2-port AMONet RS-485 PCI Master Card

- Up to 64 slave AMAX modules per ring
- Transmission (baud rate) can be up to 20Mbps
- Communication distance is up to 100 M @ 10Mbps
- · Programmable digital input to notify events
- Easy installation with RJ45 phone jack and LED diagnostic



### AMAX-1220/ 1240

High-performanced 2/4-axis AMONet Motion Slave Module

- Maximum transmission (baud rate) can be up to 20Mbps with master card
- Maximum pulse train output up to 6.5 MHz & equipped with encoder input
- 2-axis point-to-point, linear & circular interpolation
- Position compare and triggering function (AMAX-1240 only)



### AMAX-1752/ 1754/ 1756

Compact 32-ch Isolated Digital Input/ Output Slave Module

- Maximum transmission (baud rate) can be up to 20 Mbps with master card
- On-board terminal for direct wiring & LED indicators
- 2,500 V<sub>RMS</sub> isolation voltage
- Compact design for horizontal placement

### EtherCAT Solutions ▶





### PCI-1203

### EtherCAT Master PCI Card

- FtherCAT master card for Advantech and other FhterCAT IO / motion slave device connection
- · Windows utility for slave device information display and parameter setting
- Integrate Advantech Common Motion SDK for user programming
- Support multi-axes and group motion function
- · Support high density DI/O and AI/O application





### ADAM-5000/ECAT

4-slot Distributed High Speed I/O System for EtherCAT

- 4 slots with various digital and analog I/O modules is just a single EtherCAT node on the network.
- Supports EtherCAT Distributed Clock (DC) mode and SyncManager mode
- Supports the Modular Device Profile (MDP) when all modules are a pure I/O function
- Compatible with Advantech Common Motion SDK or other EtherCAT master through ENI file generation

### **Embedded Motion Controller**



### PEC-3240

Intel® Celeron® M 1.0 GHz 4-axis Embedded Motion Controller with 32-ch Digital I/O

- Onboard Intel<sup>®</sup> Celeron<sup>®</sup> M 1.0 GHz CPU
- 16-ch isolated DI and 16-ch isolated DO
- Independent 4-axis motion control

# **Data Acquisition and Control**

### A Broad Selection of Form Factors to Satisfy All Your DAQ Needs

Advantech offers a wide range of industrial data acquisition and control devices with various interfaces and functions. Based on PC technology, from ISA to PCI Express, and signal conditioning to graphical software tools, Advantech's industrial I/O products are reliable, accurate, affordable, and suitable for many industrial automation applications, such as testing & measurement, laboratory applications, machine automation, and production testing. Moreover, its brand new I/O driver, DAQNavi, supports Windows 7 and 8, helping customers seamlessly integrate Advantech's data acquisition cards to the latest platforms, improve performance, and reduce development time.









### **PCIE-1730**

### 32-ch TTL and 32-ch Isolated DI/O PCI Express Card

- 16-ch TTL DI and 16-ch TTL DO with 5 V compatibility
- 16-ch isolated DI and 16-ch isolated DO with 24 V
- High-voltage isolation on all isolated DI/ O channels (2,500 V<sub>DC</sub>)





### PCIE-1810/1816/1816H

12-bit/ 16-bt 16-ch Al Multifunction PCI **Express Card** 

- PCIE-1810 & PCIE-1816: 500 KS/s PCIF-1816H: 1 MS/s
- Analog Trigger and Digital Trigger
- Waveform Generator for AO
- 24 programmable digital I/O lines
- Two 32-bit programmable counter/ timers



### PCIE-1752/ 1754/ 1756

### 64-ch Isolated Digital I/O PCI Express Card

- PCIE-1752: 64-ch DO PCIE-1754: 64-ch DI PCIE-1756: 32-ch DI, 32-ch DO
- $\bullet$  High-voltage isolation on all channels (2,500  $V_{\text{\tiny DC}}\!)$
- · Keep the output setting and value after system hot reset
- Interrupt handling capacity







### **PCIE-1802**

### 8-ch, 24-Bit, 216 kS/s Dynamic Signal Acquisition PCI Express Card

- · 8 simultaneously sampled analog inputs up to 216 KS/s
- 24-bit resolution ADCs with 115 dB dynamic range
- Wide input ranges from ±0.2 V to ±10 V
- · Built-in anti-aliasing filter
- Software configurable 4 or 10 mA integrated electronic Piezoelectric (IEPE)



### **PCIE-1760**

### 8-ch Relay and 8-ch Isolated DI PCI Express Card

- 8-ch isolated DI with programmable digital filter
- High-voltage isolation on input channels (2,500 V<sub>DC</sub>)
- · 2-ch Form C and 6-ch Form A relay output
- 2-ch counter input and PWM output available





### **PCIE-1840**

125MS/s, 16-bit, 4-ch Digitizer

### PCI Express Card

- 4 analog inputs, up to 125MHz, 16-bit resolution
- 500 MHz Time Interleaved Sampling
- Non-stop data streaming capable
- 2 GB on-board memory
- On-Board tunable anti-aliasing filter AC/ DC Coupling

### PCI DAQ Cards >



### PCI-1714U/1714UL

### Simultaneous Analog Input PCI Card

- · Each channel has dedicated A/D converter PCI-1714U: 12-bit, 30 MS/s, 4-ch single-ended AI PCI-1714UL: 12-bit, 10 MS/s, 4-ch single-ended Al
- 30 V<sub>DC</sub> over-voltage protection



### PCI-1716/L

### 250KS/s, 16-bit, 16-ch Multifunction PCI Card

- 16 single-ended or 8 differential or a combination of analog inputs
- 16-bit A/D converter, with up to 250 kHz sampling rate
- Auto-calibration
- 16-ch digital input and 16-ch digital output
- · 2 analog output channels (PCI-1716 only)



### PCI-1730U/ 1756

### 32-ch/64-ch Isolated Digital I/O Universal PCI Card

- High-voltage isolation on output channels (2,500 V<sub>DC</sub>)
- Wide output range (5 ~ 40 V<sub>DC</sub>)
- · High-sink current for isolated output channels (90 mA
- · Current protection for each port



### USB-4711/4716

150 kS/s, 12-bit / 200 kS/s, 16-bit

### 16-ch Multifunction USB Module

- 2 analog output channels
- 5V/TTL compatible DIO (8 inputs, 8 outputs)
- 1 counter for event counting, frequency measurement and PWM output
- I ockable USB cable for secure connection



### **USB-4750**

### 32-ch Isolated Digital I/O USB Module

- 16 isolated DI and 16 isolated DO channels
- · 2 isolated counters for event counting and frequency measurement
- Keeps the last output value after system hot reset
- 2,500 V<sub>nc</sub> isolation protection



### USB-4761

### 8-ch Relay and 8-ch Isolated Digital Input **USB** Module

- 8 Form C (SPDT) relay channels
- Relay contact rating: 0.25 A @ 250  $V_{AC}$ , 2 A @ 30  $V_{DC}$
- I FD indicators to show activated relay
- 2,500 V<sub>DC</sub> isolation protection

### PCI/PCIE Communication Cards >



### PCI-1620/ 1622

### 8-port PCI Express Serial Communication Card with Surge Protection

- PCI-1610: RS-232
- PCI-1612: RS-232/ 422/ 485
- Optional surge protection DMA mastering to reduce CPU loading
- 128-byte FIFOs with advanced management



### PCIE-1620/ 1622

### 8-port PCI Express Serial Communication Card with Surge Protection

- PCIF-1620: RS-232
- PCIE-1622: RS-232/422/485
- Optional surge protection
- DMA mastering to reduce CPU loading
- · 128-byte FIFOs with advanced management



### PCIE-1672PC/ 1674PC

### 4/8-port PCI Express Power-over-Ethernet Communication Card

- Onboard DSP to reduce CPU loading
- 2,250 V<sub>DC</sub> isolation protection
- Supports Jumbo frames (9,500 byte) and link aggregation
- Supports IEEE-1588 and IEEE-802.1 AS timing and synchronization





TAIWAN

### PCIE-1602/ PCIE-1604

### 2-port RS-232/422/485 PCI-express PCI Comm. Card w/lso

- PCIE-1602: 2x RS-232/422/485 ports PCIE-1604: 2x RS-232 ports
- Optional surge protection
- Optional isolation protection for RS-232/422/485
- . DMA mastering to reduce CPU loading





### PCIE-1610/ PCIE-1612

### 4-port RS-232/422/485 PCI-express PCI Comm. Card w/Iso

- PCIE-1610: 4x RS-232 ports
- PCIE-1612: 4x RS-232/422/485 ports
- Optional surge protection
- Optional isolation protection for RS-232/422/485
- DMA mastering to reduce CPU loading





### **PCIE-1680**

### 2-port CAN-bus Universal PCI Communication Card with

### **CANopen Support**

- Operates two separate CAN networks at the same time
- High speed transmission up to 1 Mbps
- 16 MHz CAN controller frequency
- Isolation protection of 2,500 V<sub>DC</sub>
- . I/O address automatically assigned by PCI PnP

### CompactPCI Systems >

### MIC-3106/3111/3121

### 4U CompactPCI With 2/7 Peripheral Slots

- 2G operational anti-vibration protection.
- 2G shipping anti-vibration protection
- · Air-tight seal connector design for corrosive environments
- Modular design and front hot-swap enabled
- · Easily exchange peripheral cards to reduce maintenance costs













MIC-3106

MIC-3111

MIC-3121

# IoT Wireless I/O Modules

### Providing IoT Wireless Smart Devices from I/O to Sensor

As wireless applications became a more common and preferred solution, Advantech introduced a variety of wireless remote I/O devices to the market as an important enabler of the IoT. With the Wi-Fi based WISE-4000 series and popular Zigbee protocol ADAM-2000 series, our clients are free from worrying about a wired layout and extra associated costs, for a more flexible deployment. Furthermore, the WISE-4000 series brings an authentic IoT experience to the market. By realizing an "anytime and anywhere" solution, not only can users retrieve data via mobile devices, the modules can now be configured and troubleshot from mobile devices to save time.



### Wireless IoT Ethernet I/O Modules

### **WISE-4050**

### 4-ch Digital Input and 4-ch Digital Output IoT Wireless I/O Module

- 2.4 GHz IEEE 802.11b/g/n WLAN
- Protocols: Modbus/TCP, TCP/IP, UDP, DHCP, HTTP
- Supports RESTful web API in JSON format for IoT integration
- Supports both wireless client and server modes that can be accessed directly without AP or router
- Supports file-based cloud storage and local logging
- Supports mobile device web configuration with HTML5
- Supports 10~30V<sub>DC</sub> power with reverse protection



### WISE-4012

### 4-ch Universal Input and 2-ch Relay Ouput IoT Wireless I/O Module

- 2.4 GHz IEEE 802.11b/g/n WLAN
- 4-ch UI: 0~10V, 0~20mA, 4~20mA, digital input
- Supports RESTful web API in JSON format for IoT integration
- Web Services: REST, HTML5, JavaScript, JSON
- Supports both wireless client and server modes that can be accessed directly without AP or router
- Supports file-based cloud storage and local logging
- Supports mobile device web configuration with HTML5



### **WISE-4060**

### 4-ch Digital Input and 4-ch Relay Output IoT Wireless I/O Module

- 2.4 GHz IEEE 802.11b/g/n WLAN
- Protocols: Modbus/TCP, TCP/IP, UDP, DHCP, HTTP
- · Supports RESTful web API in JSON format for IoT integration
- Supports both wireless client and server modes that can be accessed directly without AP or router
- Supports file-based cloud storage and local logging
- Supports mobile device web configuration with HTML5
- Supports 10~30V<sub>DC</sub> power with reverse protection



### WISE-4012E - IoT Developer Kit

### 6-ch Universal Input/Output IoT Wireless I/O Module for IoT Developer

- 2.4 GHz IEEE 802.11b/g/n WLAN
- 2-ch 0~10V Input, 2-ch DI, and 2-ch Relay Output
- Includes WebAccess with demo project for developer
- Includes extension board for simulating sensor status
- Includes micro USB cable for power input
- Supports both wireless client and server modes that can be accessed directly without AP or router
- · Supports mobile device web configuration



### WebAccess/SCADA

### M2M (Machine to Machine) I/O Modules ▶

### ADAM-2520Z/ 2510Z

### Wireless Modbus RTU Gateway

- 2.4 GHz IEEE 802.15.4 compliant RF
- Outdoor range up to 1,000 m Supports battery input with 2 x AA alkaline batteries
- Supports Modbus RTU protocol
- Network capacity with 32 nodes (routers & end devices)
- Supports Star/ Tree/ Mesh Network Topologies





### ADAM-2051Z/ 2051PZ

### Wireless 8-ch Digital Input Node with Power Amplifier

- 2.4 GHz IEEE 802.15.4 compliant RF
- Outdoor range up to 1,000 m
- Supports battery input with 2 x AA alkaline batteries
- 10K Ω input resistance







### **ADAM-2031Z**

### Wireless Temperature & Humidity Sensor Node

- 2.4 GHz IEEE 802.15.4 compliant RF
- Low duty cycle and low power consumption
- Outdoor range up to 110 m
- Supports battery input with 2 x AA alkaline batteries
- Built-in temperature/ humidity sensor input

### ADAM-2107PZ

### Wireless 6-ch Analog Input Node with Power Amplifier

- 2.4 GHz IEEE 802.15.4 compliant RF
- 6-ch differential input: ±150mV, ±500mV, ±1V, ±5V, ±10V, ±20mA, 0~20mA, 4~20 mA







# Remote I/O Modules

### Providing Remote I/O Connectivity with RS-485 and Ethernet, with More Options

When "Internet of things" is no longer just a slogan, Advantech's versatile products boost clients' production performance by meeting different application needs. With a typical automation network using RS-485 to transmit serial signals the ADAM-4000 & robust ADAM-4100 series, and the designed for harsh environment Robust RS-485 based ADAM-4100 series, Ethernet based ADAM-6000 series and Daisy-chain Ethernet based ADAM-6200 series, managing field devices becomes easier and the field site status can be identified, tracked and altered remotely. There are over 1 million ADAMs in the world, in various industries such as industrial automation, environmental and facility management, intelligent transportation system, and so on and their record of being highly efficient devices is well proven.



### Daisy-chain Ethernet I/O Modules





### ADAM-6217/6224

### Isolated Analog I/O Modbus TCP Module

- ADAM-6217: 8-ch Al; ADAM-6224: 8-ch AO & 4-ch DI
- Daisy chain connection with auto-bypass protection Auto-calibration without providing any input
- Web language support: HTML 5, Java Script, XML
- Supports GCL and Peer-to-Peer
- Group configuration capability for setting up multiple





### ADAM-6250/6251/6256

### Isolated Digital I/O Modbus TCP Module

- ADAM-6250: 8-ch DI & 7-ch DO ADAM-6251: 16-ch DI; ADAM-6256: 16-ch DO
- Daisy chain connection with auto-bypass protection
- DI/O LED Indication; DO fail safe value
- Web language support: HTML 5, Java Script, XML
- Supports GCL and Peer-to-Peer
- Group configuration capability for setting up multiple modules





### ADAM-6260/6266

### Relay Output Modbus TCP Module (with DI)

- ADAM-6260: 6-ch RL; ADAM-6266: 4-ch RL & 4-ch DI
- Daisy chain connection with auto-bypass protection
- DI/O LED Indication; Relay fail safe value
- Web language support: HTML 5, Java Script, XML
- Supports GCL and Peer-to-Peer
- Group configuration capability for setting up multiple modules

### Smart Ethernet I/O Modules >



### **ADAM-6017**

### 8-ch Isolated Analog Input Real-time **Ethernet Module**

- 2-ch DO for Al trigger applications
- Modbus RTU, TCP/ IP, UDP and HTTP protocol
- · Embedded web server
- Supports data stream and event trigger
- Supports GCL and Peer-to-Peer



### **ADAM-6050**

### 18-ch Isolated Digital I/O Modbus TCP Module

- · Modbus RTU, TCP/ IP, UDP DHCP and HTTP protocol
- · 12-ch digital input and 6-ch digital output
- · Embedded web server
- · Supports data stream and event trigger
- Supports GCL and Peer-to-Peer



### ADAM-6060/6066

6-ch Digital Input and 6-ch Relay Modbus TCP Module/ 6-ch Digital Input and 6-ch Power Relay Modbus TCP Module

- Modbus RTU, TCP/ IP, UDP DHCP and HTTP protocol
- Embedded web server
- Supports data stream and event trigger
- Supports GCL and Peer-to-Peer

### Robust RS-485 I/O Modules



### ADAM-4117/4118

### Robust 8-ch Analog Input Module Robust 8-ch Thermocouple Input Module

- Modbus RTU protocol
- Wide operating temperature -40 ~ 85°C (-40 ~ 185°F)
- 8 differential and independent configuration channels
- High common mode voltage 200 V<sub>DC</sub>
- 1 kV surge, 3 kV EFT and 8 kV ESD protection

# RS-485 I/O Modules >

### ADAM-4017+/ 4018+

8-ch Analog Input Module 8-ch Thermocouple Input Module

- Modbus RTU protocol
- 8-ch Al/ 8-ch Thermocouple Input
- Over Voltage Protection: ±35 V<sub>DC</sub>
- · Built-in TVS/ESD protection
- Isolation Voltage: 3,000 V<sub>DC</sub>



### ADAM-4051/4055/4056

16-ch Isolated Digital Input Module 16-ch Isolated Digital I/O Module 12-ch Isolated Digital Output Module

- Modbus RTU protocol
- ADAM-4055: 8-ch DI & 8-ch DO
- Dry/ wet contact digital input level
- Isolation Voltage: 2,500 V<sub>DC</sub>
- Over Voltage Protection: 70 Vpc

# Advantech WebAccess

### The IoT Software Framework

Advantech WebAccess is a 100% web-based HMI/SCADA software. With more and more investment and development on integrating IoT applications and cloud architecture, it has become not only a HMI/SCADA software but also an IoT software framework in the IoT era. Advantech WebAccess supports powerful remote monitoring and control functions through standard web browsers, so that users can easily monitor and control automation equipment with full featured SCADA functions by their Client or Thin Client device. Starting from Version 8, Advantech WebAccess provides a HTML5 based Dashboard as the next generation WebAccess HMI. It helps system integrators to create their own dashboard and view their dashboard remotely via any device. Advantech WebAccess also provides open interfaces for system integrators to develop their IoT applications and widgets which can meet the needs of various applications.



### Advantech WebAccess HMI/SCADA Software







### **Advantech WebAccess**

### 100% Web-based HMI/SCADA Software

- Distributed SCADA architecture with central database server and multi-layer inter-operable SCADA nodes
- Supports ample drivers, including Advantech I/O, controllers and major PLCs
- Web-enabled video, audio and animation
- Excel self-defined reports
- Google Maps and GPS location tracking integration
- High availability redundant SCADA, ports and devices
- Supports open interfaces as an IoT platform

#### HTML5 Business Intelligence Dashboard

- Cross-browser, cross-platform WebAccess HMI based on HTMI 5
- Supports dynamic thin clients access for a seamless viewing experience across PC, Mac, tablet and smartphone
- Built-in widgets to customize information page by analysis charts and diagrams
- Create customized widget with graphic functionalities, like basic shape, animation, picture import, and macro command via cross-browser

### WebAccess Bundled Products

### **WA-TPC1771**

17" Touch Panel Computer with 600/5,000 Tags WebAccess

- Built-in Windows 7 Embedded with Advantech WebAccess 600/5,000 Tags
- Intel<sup>®</sup> Atom™ D525 1.8 GHz CPU
- 8 DI/O and backup SRAM support



### **WA-UNO2178A**

Compact SCADA Server with 600/5,000 Tags WebAccess

- Built-in Windows 7 Embedded with Advantech WebAccess 600/ 5,000 Tags
- Intel<sup>®</sup> Atom™ D510 1.67 GHz CPU
- $\bullet$  2 x GbE, 8 x COM, 6 x USB 3.0 and 2 x MiniPCle



### Semiconductor Data Gateway

#### WA+SECS

WebAccess SECS Server with Intel® Core™ i7 Automation Computer

- SECS protocol embedded –SEMI standard compliant interface for data collection
- Provides SECS functions for polling, trace and event notification by configuration
- Bundled with Advantech WebAccess, browser based HMI/SCADA software



### Energy Data Gateways >

#### BEMG-4221/4222

Energy Data Conentrator with 6 x USB, 4x COM / 8x COM. 128 Devices

- Built-in Windows CE with Advantech WinCE
   WebAccess
- Web-server functions support customers with remote configuration, remote operation, remote maintenance
- Combines Advantech BEMS and power meter for energy saving solution



# Rugged Tablets as Portable HMIs

### **Enabling Intelligent Real-Time Inspections and Onsite Management**

Advantech's portable HMI products are designed to assist mobile workers with conducting and managing onsite inspections. Equipped with the latest Intel<sup>®</sup> chipset and RF technology (WLAN, WWAN, and GPS), Advantech's rugged tablets enable data to be transmitted and processed seamlessly, ensuring workers have constant access to relevant information. Integrated I/O (dual camera, RFID, NFC RFID, and RS-232) and extensive userfriendly accessories (including a vehicle docking station, desk docking station, universal cover, and customizable extension modules) support rapid data collection and mobile operation for substantially increased productivity. The rugged product designs (MIL-STD-810G and IP65 certification with a drop tolerance of up to 4 ft.), sunlight-readable displays, and long battery life are designed to facilitate the completion of complex tasks in harsh field environments.



### Fully Rugged Tablet >



#### Wall Docking Station

- · Anti-theft locking mechanism · Rapid device docking and removal
- Equipped with 1 x DC-in, expansion I/O, 2 x USB 3.0, 1 x LAN, and 1 x GNSS port

### 10" 16:9 Fully Rugged Tablet with Fourth Generation Intel® Core™ i Processor

- MIL-STD-810G and IP65 certified, and can withstand drops of up to 4 ft.
- 10.1" HD high-brightness, multi-touch, Gorilla Glass panel with digitizer
- Fourth generation Intel® Core™ i processor supports
- Built-in 4G LTE, WLAN (802.11 a/b/g/n/ac), BT4.0, and GPS modules with Beidou/GLONASS support
- Hot-swappable battery offers up to 11 hours operation
- Built-in dual cameras, a 1D/2D barcode scanner, and NEC REID
- Wide array of peripherals including a vehicle docking station, desk docking station, and customizable extension modules



#### **Desk Docking Station**

- Equipped with 1 x DC-in, 2 x USB 3.0, 1 x LAN, 1 x RS-232, and 1 x VGA port
- Secondary battery charger

**Desk Docking Station** 

Secondary battery charger

1 x LAN, and 1 x RS-232 port

• Equipped with 1 x DC-in, 2 x USB 2.0,



#### Universal Cover

- · Made from black plastic and PVC Measures Approx.
- 305 x 254.2 x 88.4 mm
- · Designed for easy carrying



#### **Extension Module**

- MSR and smart card reader extension
- I/O extension
- UHF RFID extension

Equipped with Wi-Fi, Bluetooth, GPS, and WWAN

Supports optional data capture modules

(1D/2D barcode scanner, MSR, and RFID)

(3.75G) technology

### Rugged Tablet >





#### Wall Docking Station

- · Anti-theft locking mechanism
- Rapid device docking and removal
- Equipped with 1 x DC-in, expansion I/O, 2 x USB 2.0, 1 x LAN, and 1 x SMA (for GPS) port

### 10" 4:3 Rugged Tablet with Intel® Atom™ N2600 Processor

- 10.4" XGA LED, high brightness (300 cd/m2), WAV transflective-LCD panel
- · Hot swappable, high-capacity li-ion battery provides 8 hours of operation
- Wide variety of I/O ports support various applications
- IP54 certified with a drop tolerance of up to 4 ft.
- Lightweight design (1.2 kg)

#### Carry Bag



Hand Strap

Made from black PVC



Made from black PVC

### **Regional Service & Customization Centers**

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